

**ASX Announcement | 16 February 2023** 

# GEOCHEMICAL RESULTS DELIVER IOCG TARGETS AT ONSLOW PROJECT

GCX Metals Limited ("GCX" or "Company") is pleased to report the results from a regional geochemical survey at the Company's Onslow Copper Gold Project ("Project") which has generated and confirmed several large-scale iron oxide copper gold ore deposits ("IOCG") and volcanic-hosted massive sulfide ("VHMS") targets that warrant further exploration.

#### **HIGHLIGHTS:**

- Independent review of regional geochemical survey has produced several IOCG and VHMS anomalies that are proximal with targets previously identified by recent magnetic and electromagnetic ("EM") surveys.
- GCX has commenced a tenement wide gravity survey that may further assist with drill targeting.
- A drilling contractor has been selected and drilling is planned to commence in April to test the high-priority EM targets in the south of the Project.

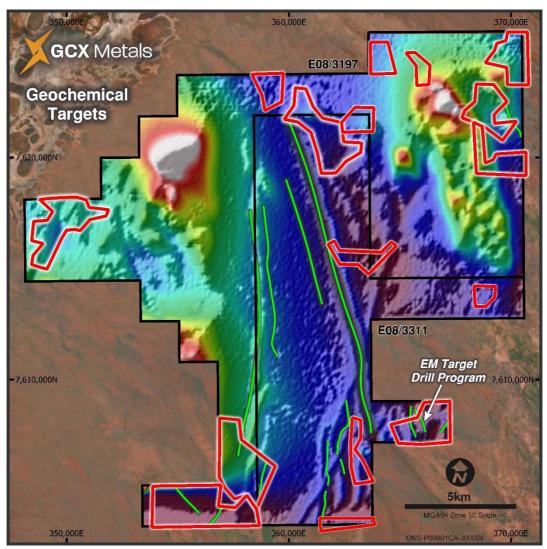


Figure 1: Onslow Copper Gold Project geochemical targets (over TMI magnetic image)

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## **Regional Geochemical Sampling**

In October 2022, the Company completed a tenement wide geochemical survey over the Company's Onslow Copper Gold Project. The geochemical survey aimed to cover several large-scale magnetic features in the northern portion of the Project that warrant investigation for IOCG style mineralisation as well as the southern VHMS targets highlighted by the airborne and ground EM surveys last year (Figure 1).

Over a 3-week period, XM Logistics collected 1,240 samples on a 500m x 500m grid covering an area of approximately 309km². The samples were dispatched to LabWest in Perth where they underwent UltraFine+™ multi element sample analysis, including rare earths.

The UltraFine+™ assay method was selected as the most suitable to return a surface response to any potential underlying basement mineralisation. The Proterozoic basement targets are located under cover of Carnarvon Basement sediments that are estimated to range between 40-400m deep, with shallow modern alluvial/colluvial material located at surface.

### Interpretation

In early 2023, the assay results were reviewed and interpreted by an independent geochemist. The data quality was assessed as very good and suitable for interpretation.

A targeting investigation was undertaken using 1240 -2µm soil UFF batch levelled samples that had subtle batch variation removed. The anomalies were derived using a weighted sums method that was calculated using economic and selected supporting elements for VHMS and IOCG deposit styles. Anomalism was defined as values >90th percentile.

Geochemical fingerprints for these deposit styles are typically as follows (Bold elements are the main economic elements):

VHMS: Cu, Pb, Zn, Ag, Au, Sb, Sn, Bi, Mo, Ba, W

IOCG: Cu, Pb, Zn, Ag, As, Au, Bi, Mo, Ba, W, U, Co, Ce, La, K.

Targets were initially identified using the main economic element/s of interest and/or weighted sum and then ranked using supporting pathfinder elements. Lastly, other anomalous elements, which were pathfinders for other deposit styles, were also noted.

A total of 16 VHMS/IOCG targets were defined. A number of the spatially large subtle anomalies (Figure 1) sit in geophysically interesting areas that in conjunction with the magnetic and gravity data provide several large-scale targets suitable for drill testing. Given the estimated cover (40-400m), the results are considered encouraging.

The targets located over the significant northern magnetic features will be the initial focus. It is worth noting the presence of several geochemical anomalies in areas located away from the known magnetic targets. The gravity survey currently underway may assist in deciding whether to follow up these unexpected anomalies.

## **Future Work**

#### RC Drilling of EM Targets

The upcoming reverse circulation ("RC") drill program is primarily designed to test the high priority, newly identified shallow EM conductors for potential sulphide hosted mineralization in the southern portion of the Project.

Several anomalies identified from the regional geochemical survey are proximal with these previously identified shallow EM conductors and will assist in refining plans for the RC drill program.

The Company has received approval for its program of work ("POW") and heritage clearance for this RC drill program. Drill line clearing and sumps for the planned RC program have also been completed.

A drilling contractor has now been selected and drilling is planned to commence in April.

## Gravity

A tenement wide gravity survey on 800m x 800m spacing with 400m x 400m infill in areas of interest is currently underway. The results of the survey are intended to refine drill-targeting process for the large-scale IOCG/magnetic features in the north of the Project. The gravity survey is also designed to identify coincident gravity, geochemical and EM anomalies that have the potential to host VHMS style mineralisation in the south.



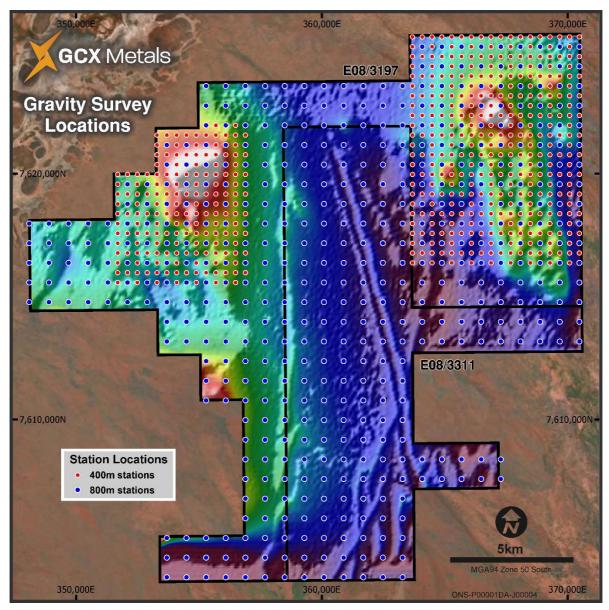


Figure 3: Planned Gravity Survey Stations

For further information, please contact:

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## **About the Onslow Gold Project**

The Onslow Copper Gold Project is located in the northwestern extension of the Capricorn Orogen and is considered prospective for gold and copper. Nearby 1990's historic exploration identified the potential for banded-iron-formation hosted gold and iron-oxide hosted copper-gold mineralisation.

The Project covers 567km<sup>2</sup> and comprises three tenements. The Company owns 100% of granted licence E08/3311 (121km<sup>2</sup>) and 80% of granted licence E08/3197 (188km<sup>2</sup>). The Company has also applied for E08/3462, comprising a further 258km<sup>2</sup> of prospective ground located adjacent to E08/3311.

Historical drilling on the tenements was almost exclusively focused on the cover sequence in the search for pisolitic iron mineralisation and hence the Proterozoic basement is considered essentially untested. A recent review of historic airborne electromagnetic surveys confirmed several anomalies that have never been drill tested.

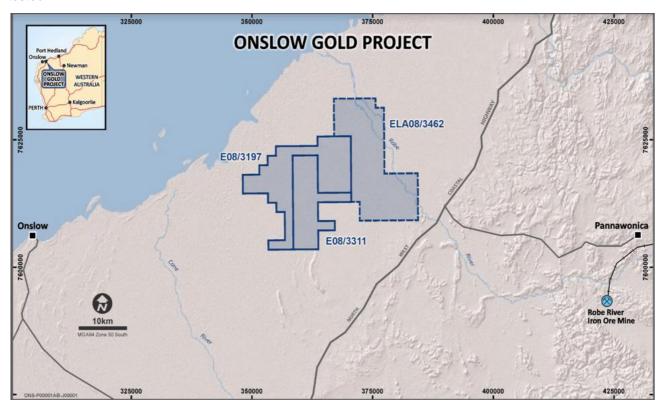


Figure 3: Onslow Copper Gold Project Location



### Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Peter Woodman who is a consultant to GCX Metals Limited. Mr Woodman is a Member of the Australian Institute of Mining and Metallurgy. Mr Woodman has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Woodman consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Forward Looking Statements

Statements regarding plans with respect to GCX's project are forward-looking statements. There can be no assurance that the Company's plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

This ASX announcement has been approved in accordance with the Company's published continuous disclosure policy and authorised for release by the Company Secretary.



# Appendix 1: JORC Code, 2012 Edition – Table 1 North Onslow

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Soil sample survey on a regular 500mx500m spacing.  Approximately 200g of sample was taken from a nominal 20cm below surface. Samples were placed in plastic sealable bags and the location recorded.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Independent analysis of the results was completed by an external geochemist who deemed the assay quality to be good.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Collection of <2 micron fraction from soils samples  Analysis and reporting of Au plus full 50 element suite by ICP-MS/OES  Including analysis of Rare Earth Elements
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	No drilling results reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling results reported.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	No drilling results reported.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No drilling results reported.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	No drilling results reported.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	No drilling results reported.
	The total length and percentage of the relevant intersections logged.	No drilling results reported.
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling results reported.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling results reported.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No drilling results reported.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No drilling results reported.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	No duplicate samples taken
	Whether sample sizes are appropriate to the grain size of the material being sampled.	No drilling results reported.
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The UFF analysis was conducted at a certified independent Laboratory: Labwest Minerals Analysis Pty Ltd, Malaga, WA.
	Sociation partial of total.	Analysis Method : Labwest code UFF-PER:



Criteria	JORC Code explanation	Commentary
laboratory tests		Collection of <2 micron fraction from soils samples Analysis and reporting of Au plus full 50-element suite by ICP- MS/OES. Including analysis of Rare Earth Elements
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not used
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	No standards submitted.
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	Final geochemical data reviewed, processed and interpreted by external geochemical consultant Sugden Geoscience.
and assaying	The use of twinned holes.	No drilling results reported.
-	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data was received as excel files and analysed with ioGAS software
	Discuss any adjustment to assay data.	Assays results were batch adjusted and multi element analysis applied to derive anomalies
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Sample locations recorded with handheld GPS
	Specification of the grid system used.	Sample locations were collected and reported using the GDA94 Zone 50 grid system.
	Quality and adequacy of topographic control.	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	A regular 500m x 500m grid was employed
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Sample spacing considered to be adequate for the scale of targets tested.
	Whether sample compositing has been applied.	No
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Soil sample grid considered unbiased due to regular grid spacing
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No drilling results reported.
Sample security	The measures taken to ensure sample security.	Sealed samples were delivered to the laboratory via courier and the soil sample contractor XM logistics
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Geochemical data has been independently checked by consultant Sugden Geoscience.



## **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The exploration results in this report relate to Exploration Licences E08/3197, E08/3311.  E08/3311 is 100% owned by GCX Metals.  GCX Metals has entered into an agreement to acquire 80% of E08/3197 from Onslow Metals Group Pty Ltd.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Tenure in the form of Exploration Licences with standard 5-year expiry dates which may be renewed.  There are no known impediments to obtaining a licence to operate in this area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous regional exploration on E08/3197, E08/3311 was undertaken by various companies and included, geophysical surveys, minor geochemical surveys and limited drilling.  Historical geophysical surveys included an airborne electromagnetic survey. Geochemical surveys included single line style soil sampling.
Geology	Deposit type, geological setting and style of mineralisation.	The targeted deposit types and styles of mineralisation are copper-gold sulphide systems such as the Ernest Henry deposit and VHMS Base metal style mineralisation.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth hole length.	No drilling results reported
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No information excluded
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	See explanation in main body of text re interpretation of results
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No aggregates calculated
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
Relationship between mineralisati on widths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No drilling results reported.
and intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	No drilling results reported.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate diagrams are included in the main body of this report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reporting of the geochemical results is considered balanced.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No additional meaningful and material exploration data has been excluded from this report.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout drilling).	See main body of the report for planned work
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	These diagrams are included in the main body of this report.